



JENOPTIK

Diode laser stack in housing: qcw, tap water cooled JOLD-x-QA-2x8A

Design 04022103124

Features

- High optical output power up to 1.6 kW
- Wavelength: 808 nm
- Small and robust design, light weight
- Sealed housing
- Cooling with tap water

Applications

- Pumping of solid-state lasers
- Medical applications

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JOLD-x-QA-2x8A

Specifications (start of life)

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Operation Mode	qcw				
Maximum Pulse Length/Duty Cycle	50 ms/15 %	100 ms/20 %	200 ms/33 %	400 ms/55 %	
Maximum Pulse Power	1600	1100	560	300	W
Maximum Mean Power	234	220	184	165	W
Maximum Pulse Energy	78	110	112	120	J
Center Wavelength at 25 °C	808	808	808	808	nm
Center Wavelength Variation at 25 °C	10	10	10	10	nm
Typical Operation Current	110	85	55	42	A
Maximum Operation Current	120	90	60	45	A
Typical Threshold Current	15	15	15	15	A
Maximum Threshold Current	20	20	20	20	A
Typical Slope	16.6	15.8	14.0	11.2	W/A
Minimum Slope	14.8	14.6	12.4	10.0	W/A
Maximum Operating Voltage	30	30	30	30	V
Typical Fast Axis Divergence 95 %	66	66	66	66	°
Typical Slow Axis Divergence 95 %	10	10	10	10	°
Spot Size (at exit window)	15 mm x 26 mm				
Anode, Cathode Connectors	Via two M3 x 8 screws (ISO 4762)				
Weight	98				g
Operation Conditions	Non-condensing atmosphere; no cleanroom needed				
Expected Lifetime	15	15	7	4	Mshots
Cooling					
Flow Rate	1.6 l/min ± 10 %				
Water Temperature	15 ... 25 °C				
Maximum Inlet Pressure	400 kPa				
Maximum Pressure Drop	100 kPa				
Water Connection	Via o-ring gaskets 6 mm x 1 mm, EPDM, 70 shore				
Water Quality	Industrial grade, anti-freeze possible, particle filter < 100 µm (not included)				
Cooling System	Do not use any material that in combination with copper would form galvanic elements (e.g. aluminum, zinc, brass)				

See general user information!

Options on request: variation number of bars, fast axis collimation

